

WHAT IS CLAIMED IS:

1. An image forming apparatus, comprising:
 - a photosensitive device;
 - a wire disposed along an axial direction of the photosensitive device;
 - a cleaning unit slidably contacting the wire along a longitudinal direction of the wire;
 - a process unit supporting the photosensitive device, the wire and the cleaning unit;
 - a guide portion that accommodates the process unit, is perpendicular to the longitudinal direction of the wire, and guides the process unit upon movement of the process unit; and
 - a moving device that moves the cleaning unit in the longitudinal direction of the wire in synchronization with the movement of the process unit.
2. The image forming apparatus according to claim 1, further comprising:
 - an accommodating portion that accommodates the process unit therein,
 wherein the process unit is guided by the guide portion while the process unit is attached to or removed from the accommodating portion.
3. The image forming apparatus according to claim 1, the moving device comprising:
 - a driving member that is provided with the process unit and moves the cleaning unit; and
 - a contacting member that is provided with a casing of the image forming apparatus and contacts the driving member.
4. The image forming apparatus according to claim 3, wherein the driving member and the contacting member move the cleaning unit from a first end to a second end in the longitudinal direction of the wire in synchronization with an operation where the process unit is attached to an accommodating portion, and the driving member and the contacting member move the cleaning unit from the second end to the first end in the longitudinal direction of the wire in synchronization with an operation where the process unit is removed from the accommodating portion.
5. The image forming apparatus according to claim 4, wherein
 - the driving member has a support shaft extending parallel to the longitudinal direction of the wire and rotatably supported and a gear rotatable integrally with the support shaft,

the contacting member is provided parallel to an attachment direction of the process unit and includes a rack engaged with the gear,

the support shaft has a plurality of threads on a surface of the support shaft with specified pitches, and

the cleaning unit has a through hole defined by a surrounding surface formed with a plurality of threads having pitches identical to the pitches of the support shaft, and the cleaning unit reciprocates on the support shaft by rotation of the support shaft.

6. The image forming apparatus according to claim 4, wherein
the driving member is a protrusion provided integrally with the cleaning unit,
the contacting member is provided between the first end and the second end of the wire and has a groove to be engaged with the protrusion, and
the protrusion moves from the first end of the wire to the second end when in a state of engagement with the groove upon the movement of the process unit.

7. The image forming apparatus according to claim 6, wherein the groove has a substantially constant width and includes one end with a wider width.

8. The image forming apparatus according to claim 2, wherein the accommodating portion includes a positioning portion contacting the process unit.

9. The image forming apparatus according to claim 8, wherein the positioning portion is provided in the guide portion and contacts both ends of the process unit with respect to the longitudinal direction of the wire.

10. The image forming apparatus according to claim 1, further comprising:
a casing having an openable cover and an opening, wherein the cover opens in a direction perpendicular to the longitudinal direction of the wire.

11. The image forming apparatus according to claim 10, wherein the process unit has a housing supporting the photosensitive device and a developing cartridge supporting a developing agent carrier, and the developing cartridge is detachable from the housing.

12. The image forming apparatus according to claim 11, wherein the process unit is detachable through the opening with the developing cartridge attached to the housing.

13. The image forming apparatus according to claim 12, further comprising:
a cassette disposed detachably from the casing and accommodating a sheet therein, wherein a direction where the cassette is placed in the casing is identical to a direction where the process unit is attached to the casing.

14. A method of cleaning a wire disposed along an axial direction of a photosensitive device, comprising:

moving a cleaning unit in a longitudinal direction of the wire in synchronization with a movement of a process unit, wherein the cleaning unit is in slidable contact with the wire along the longitudinal direction of the wire, the process unit supports the photosensitive device, the wire and the cleaning unit and a guide portion accommodates the process unit, is perpendicular to the longitudinal direction of the wire, and guides the process unit upon movement of the process unit.

15. The method of claim 14, further comprising:

moving the cleaning unit from a first end to a second end in the longitudinal direction of the wire in synchronization with an operation where the process unit is moved relative to the guide portion in a first direction; and

moving the cleaning unit from the second end to the first end in the longitudinal direction of the wire in synchronization with an operation where the process unit is moved relative to the guide portion in a second direction.

16. The method of claim 15, wherein the process unit is moved relative to the guide portion in the first direction and the second direction by moving a driving member that is provided with the process unit relative to a contacting member that is provided with a casing of the image forming apparatus and contacts the driving member.